K.J. Quinn
Seabrook, NH

DANIEL S. GREENBAUM
Commissioner

The Commonwealth of Massachusetts
Department of Environmental Quality Engineering
Metropolitan Boston - Northeast Region
5A Commonwealth Avenue
Woburn, Massachusetts 01801

PRELIMINARY ASSESSMENT LETTER REPORT

TO: Harish Panchal, MSCA Coordinator, Boston

FROM: Hung Nguyen, Environmental Engineer, NERO HN

THRU: Liz Callahan, Environmental Analyst, NERO

DATE: March 17, 1989

SUBJECT: SALISBURY - Wells #1,5 & 6
Folly Mill Rd., Forest St. & Lafayette Rd., Salisbury, MA 01952
EPA ID# MAD980909220

This Preliminary Assessment has been prepared by personnel from the Massachusetts Department of Environmental Quality Engineering (DEQE) in partial fulfillment of obligations to the Environmental Protection Agency (EPA) under the Multi-Site Cooperative Agreement (MSCA).

Site Description and History

The three subject wells (#1,5 & 6) are currently owned by the Salisbury Water Supply Company (SWSC), whose office is located in Salisbury, Massachusetts. Well #1 is located off Folly Mill Road in Seabrook, New Hampshire. Wells #5 and 6 are located off Main Street, east of Interstate 95. All three wells are in the USGS Newburyport West Quadrangle. (Appendix 1, Figure 1). The water supply of the SWSC is presently derived from three gravel-packed wells (#5,6 & 7) and a connection with the Town of Amesbury.

Well #1 is an 18-inch diameter gravel packed well that is 44'1" deep. It was installed in 1938 in the center of a 41 1/2 foot diameter by 20 feet deep dug well that was constructed in 1921. Before being shut down due to VOC contamination, the well was used only in the summer to help meet peak demand. Due to the high iron and manganese causing numerous complaints whenever this well was used, it was to be used only on an emergency basis.

Well #5 is a 24" x 36" gravel-packed well 43'9" deep and was constructed in 1957. Well #6 is a 24" gravel-paced well 55'7" deep and was constructed in 1961. Both wells have electric motor driven turbine pumps. The wells are approximately 200' apart. The combined safe daily yield is estimated to be 0.7 MG. Manganese levels range from 0.4 to 0.8 mg/l. Iron levels vary widely but at times exceed drinking water standards. Currently, these two wells are used as a base supply (50%) along with well #7 (50%). The Amesbury Connection is used as an emergency source. (See Appendix 1 for more detailed information on the wells).

Description of Hazardous Conditions, Incidents

In 1983 the DEQE learned from a report submitted to the New Hampshire Water Supply and Pollution Control Commission by Weston Consultants (WC) on behalf of K.J. Quinn & Co., Inc. (KJQ), that well #1 was contaminated with 1,1,1-trichloroethane. KJQ is located approximately 1,200 feet northwest of wells #1,5 & 6. The company manufactures thermoplastic polyurethane elastomers in pellet and granular form. Polyurethane emulsions in solution form are mixed in reactors, which are cleaned between batches. All hazardous wastes are generated as a result of the use of MEK, toluol, xylol, cellosalve acetate and dimethyl forminide as wash solvents in reactors.

Subsequently, well #1 was closed and a groundwater treatment system was constructed at the KJQ site. Water from wells #5, 6 were collected and analyzed by DEQE in August 1983. Analytical results indicated no VOC contamination According to water analysis reports submitted to DEQE Division of Water Supply (DWS) by SWSC, no volatile organic compounds were detected in water from wells #5 & 6 in 1987 (Appendix 2).

In 1984 water samples from monitoring wells MW15, MW16 and MW17 (see Appendix 2, Figure 1 for locations of these wells) were analyzed for VOCs (EPA Method 624) by WC. Based on the analytical results, WC concluded that there was no contaminant migration from the KJQ site in the direction of wells #5 & 6. The DEQE DWS at that time responded that further assessment should be done in order to adequately address the likelihood of the contaminants migrating from KJQ site and impacting wells #5 & 6 (Appendix 2).

Nature of Hazardous Material

In 1983, during an environmental assessment conducted at KJQ site by WC, water from well #1 was found to be contaminated with 1,1,1-trichloroethane (6 ug/l). Subsequent testing of the three wells (#1,5 & 6) by the DEQE/Lawrence Experiment Station in 1983 indicated that water from well #1 was contaminated with 1,1,1-trichloroethane (6.8 ug/l), trichloroethylene (1.9 ug/l) and an undetermined concentration of tetrahydrofuran. No organic compounds were detected in wells #5 and 6.

Water from all Salisbury wells exceeds the Federal Secondary Maximum Contaminant Levels (MCL) for iron and/or Manganese. Manganese is the dominant water quality concern in wells #5 & 6, but iron has been measured at times in excess of 2.0 mg/l. There is no health risk associated with the presence of these inorganic species at high levels. Sodium at times has been detected in the wells at 20 to 40 mg/l. SWSC currently has no treatment, but within the next several months disinfection with sodium hypochlorite and corrosion control with zinc polyphosphate will be utilized.

Routes for Contamination Migration

Well #1 has been determined to be contaminated by hazardous materials of the same nature as those found in the groundwater at the KJQ site. Due to this contamination the well has been closed. A groundwater treatment system has been in operation at KJQ site since 1983. Wells #5 & 6, approximately 2,000 ft. southwest of well #1, and well #7, approximately one mile northwest of well #1, have never been determined to be contaminated with hazardous materials, including VOCs, since the discovery of well #1 contamination in 1983. No information on groundwater flow direction, contaminant migration is available at this time.

Possible Affected Population and Resources

The SWSC serves almost the entire Salisbury population, which is approximately 6,500. During the summer season, the population increases to approximately 22,000 (Appendix 3). The territory served covers approximately 13.2 square miles in area, in which there are a few scattered homes with private drinking water wells. The Merrimac River, a vital source of water supply for several surrounding communities, is approximately 4 miles south of the SWSC wells.

The Town of Salisbury is residentially and commercially oriented and has no heavy industry and very little light industry. The Town attracts summer tourists with its beach and boardwalk area. Over the past six years, the average daily demand for water is 1.152 MG (million gallons) and has increased approximately 3% per year, while the average summer daily demand is approximately 1.61 MG and has only been increasing by 1% per year.

Site Geology and Hydrogeology

Most of the area in the Town of Salisbury is underlain by unconsolidated deposits varying in thickness from a few feet to over 145 feet. The unconsolidated sediments consist of clay, silt, sand, gravel, cobbles and boulders. Of the unconsolidated sediments, relatively deep deposits of coarse stratified sand and gravel drift are the only source of moderate to large

quantities of groundwater. The coarse water bearing deposits of sand and gravel encountered in wells 5 & 6 are limited in occurrence both laterally and vertically, and if the deposits are continuous they occur in relatively narrow zones perhaps only a few hundred feet in width. These areas of interest have not been delineated with any degree of accuracy by the test drilling and hydrogeologic studies.

Based on data from pumping test of wells #5 & 6 in April 1961, it is concluded that the aquifer in which wells 5 and 6 are completed is an elongated narrow strip of sand and gravel. The cone of influence extends to the south at least two miles or more. The source of recharge to the aquifers is mainly from local precipitation, and some recharge is drawn to the wells from the northern part of Salisbury and adjacent areas in Seabrook, New Hampshire.

Conclusions and Recommendations

Well #1 has been closed due to VOC contamination. Wells #5 and 6 have been annually tested for metals and VOCs by the SWSC and the results submitted to DEQE DWS have not indicated any contamination since the discovery of well #1 contamination. However, the potential for contaminant migration from KJQ site in the direction of wells #5 & 6 has not been adequately addressed. Whether there is a potential for contamination of these wells is unknown. A Site Investigation under MSCA, therefore, is recommended on a "medium" priority basis.

HN/ae

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE: MA | 02 SITE NUMBER: MAD980909220

II. SITE NAME AND LOCATION

01 SITE NAME	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Wells #1,5 & 6	Off Interstate Highway 95

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Salisbury	MA	01952	Essex	009	6th

09 COORDINATES LATITUDE	LONGITUDE
42° 52' 00".0	070° 53' 00".0

10 DIRECTIONS TO SITE (Starting from nearest public road)
From Boston take 93N to 95N. Wells #5 and 6 are located off Forest St. and Lafayette Road, respectively (east side of Interstate Highway 95).

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Salisbury Water Supply Company	52 High Street

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Hampton	NH	03246	(617) 926-3319

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Same as above	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☐ YES DATE ___/___/___ (MONTH DAY YEAR)
☒ NO

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)	03 YEARS OF OPERATION		
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	1938 (BEGINNING YEAR)	Present (ENDING YEAR)	☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Well #1, located in New Hampshire along the Massachusetts border, has been closed due to VOCs contamination and physical damage (well is old, installed in 1938). Wells #5 & 6 are in operation. No hazardous waste contamination of wells has been acknowledged since their installation in 1957 and 1961. The water in wells is some what high in iron, manganese & sodium.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Wells #5 & 6 and another SWSC well (#7) serve the entire Salisbury population of 6,500 (about 22,000 during summer season) with the exception of a few homes having private wells. The Merrimac River is approximately 4 miles south of the wells.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspection at time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Hung Nguyen	DEQE	(617) 935-2160

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Hung Nguyen	DEQE		(617) 935-2160	3 / 10 / 89 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
MA	MAD980909220

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A SOLID
- ☐ B POWDER, FINES
- ☐ C SLUDGE
- ☐ D OTHER _____ (Specify)
- ☐ E SLURRY
- ☒ F LIQUID
- ☒ G GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS Unknown
NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A TOXIC
- ☐ B CORROSIVE
- ☐ C RADIOACTIVE
- ☐ D PERSISTENT
- ☒ E SOLUBLE
- ☐ F INFECTIOUS
- ☐ G FLAMMABLE
- ☐ H IGNITABLE
- ☒ I HIGHLY VOLATILE
- ☐ J EXPLOSIVE
- ☐ K REACTIVE
- ☐ L INCOMPATIBLE
- ☐ M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	Unknown		
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently used CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	1,1,1-Trichloroethane	71-55-6	in groundwater	6.8	ug/l
"	Trichloroethylene	79-01-6	"	1.9	"
"	Tetrahydrofuran	109-99-9	"	trace	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Massachusetts DEQE/Division of Water Supply
New Hampshire Department of Environmental Services/Hazardous Waste Management Bureau
Salisbury Water Supply Company

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: MA | 02 SITE NUMBER: MAD980909220

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION | 02 ☒ OBSERVED (DATE: 9/83) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown | 04 NARRATIVE DESCRIPTION

In August 1983, personnel from DEQE's office took water samples from wells #1, 5 & 6 for analysis of organic compounds. Tetrahydrofuran, 1,1,1 trichloroethane and Trichloroethylene were found in sample from well #1. No organic compounds were detected in wells #5 & 6.

01 ☐ B. SURFACE WATER CONTAMINATION | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ | 04 NARRATIVE DESCRIPTION

01 ☐ C. CONTAMINATION OF AIR | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ | 04 NARRATIVE DESCRIPTION

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ | 04 NARRATIVE DESCRIPTION

01 ☐ E. DIRECT CONTACT | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ | 04 NARRATIVE DESCRIPTION

01 ☐ F. CONTAMINATION OF SOIL | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: ____ (Acres) | 04 NARRATIVE DESCRIPTION

01 ☒ G. DRINKING WATER CONTAMINATION | 02 ☒ OBSERVED (DATE: 1983) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown | 04 NARRATIVE DESCRIPTION

In 1983, water samples from well #1 were found to be contaminated with 1,1,1-trichloroethane, trichloroethylene and tetrahydrofuran. The well was then closed. Contaminants were suspected to migrate from K.J. Quinn facility, approximately 1,200 ft. northwest of the well.

01 ☐ H. WORKER EXPOSURE/INJURY | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ____ | 04 NARRATIVE DESCRIPTION

01 ☐ I. POPULATION EXPOSURE/INJURY | 02 ☐ OBSERVED (DATE: ____) | ☐ POTENTIAL | ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ | 04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
MA	MAD980909220

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include numbers of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills, runoff, standing liquids, leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

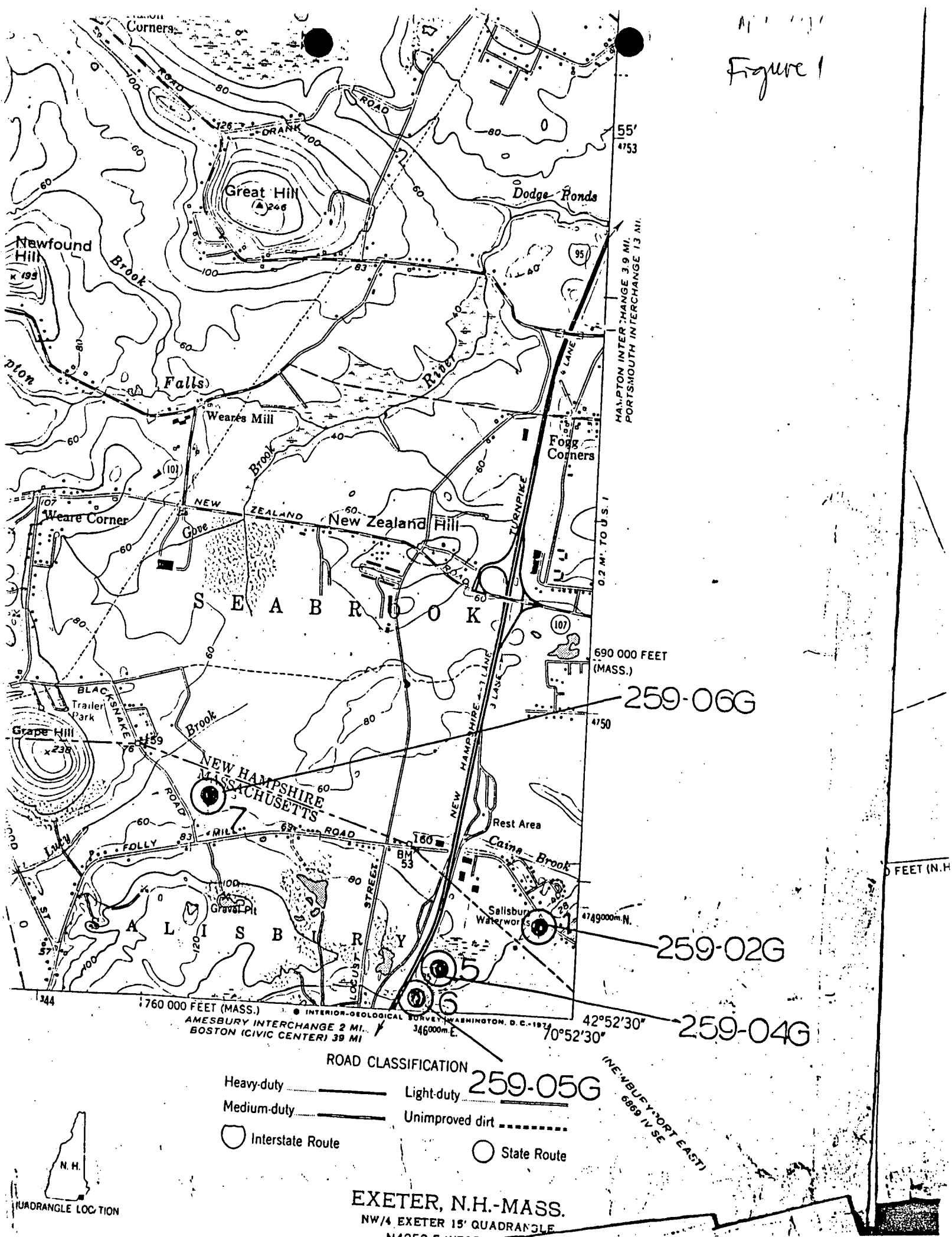
A Site Investigation under CERCLA is recommended on a "medium" priority basis.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1) Massachusetts DEQE/Division of Water Supply
2) New Hampshire Department of Environmental Services/Hazardous Waste Management Bureau.
3) Salisbury Water Supply Company

APPENDIX 1

Figure 1



EXETER, N.H.-MASS.

NW/4 EXETER 15' QUADRANGLE

January 16, 1981

	Initials	Date
Prepared by		
Approved by		

The Salisbury Water Supply Company

Data of Well Construction and Pump Settings

1	2	3	4	5	6	7
Well Number			#1	#5	#6	#7
Year Installed			1938	1957	1961	1967
Depth of Well From Base			44'-1"	43'-9"	55'-7"	56'
Diameter of Casing			18"	24"	24"	24"
Length of Screen			15'	10'	15'	10'
Depth to Top of Screen			30'	33'-9"	40'-7"	46'
Length of Air Line			39'			
Top of Pump Bowl Assembly			30'	29'-9"	40'	40'
Length of Pump Bowl Assembly			5'-2"	5'-3"	4'-8"	5'-6 3/4"
Length of Tail Piece			6"	none	2'	5'
Diameter of Pump Bowl Assembly			10"	8"	10"	12"
Number of Stages			7	6	5	5
Rated Capacity of Pump GPM			500	400	450	700
Versus Total Dynamic Head			260'	160'	156'	300'
Diameter of Pump Column			6"	6"	6'	8"
Rated Horse Power of Driver			40	25	25	75
Brake Horse Power of Diesel Engine			-	-	-	72

GROUNDWATER SURVEY

REPORT

Date filed: January 27, 1987
Reporting period: 1/1/86 to 12/31/86

Town Salisbury
PWS ID# 3259000

Completion and filing of this report meets the requirements of the Drinking Water regulations of Massachusetts 310 CMR 22.21(3)

Public Water Supply System Name Salisbury Water Supply Co.

Address P.O. Box 633 No. Hampton, N.H. 03862

Name and Title of Person
Completing report Laurel Flax Operations Superintendent
Tel. 617-462-6732

Name of Well* Well #1 Folly Mill Rd.
Location of Well Folly Mill Rd., Seabrook, N.H.
Area around well owned by Water Utility 8 Acres
Distance from well owned by Water Utility Minimum 50' Maximum 600'

1. Please list distance from well to any of the following, if less than 400 feet:

Road 50'
Stream 40'
Surface Drain
Sanitary Sewer
Farm
Miles of road within 400 feet

Homes 350'
Business 350'
Office
Subsurface Sewage System
Garage
Parking Area (how many vehicles)
Storage area
Other Use

2. Please list distance from well to any of the following if less than 1/2 mile:

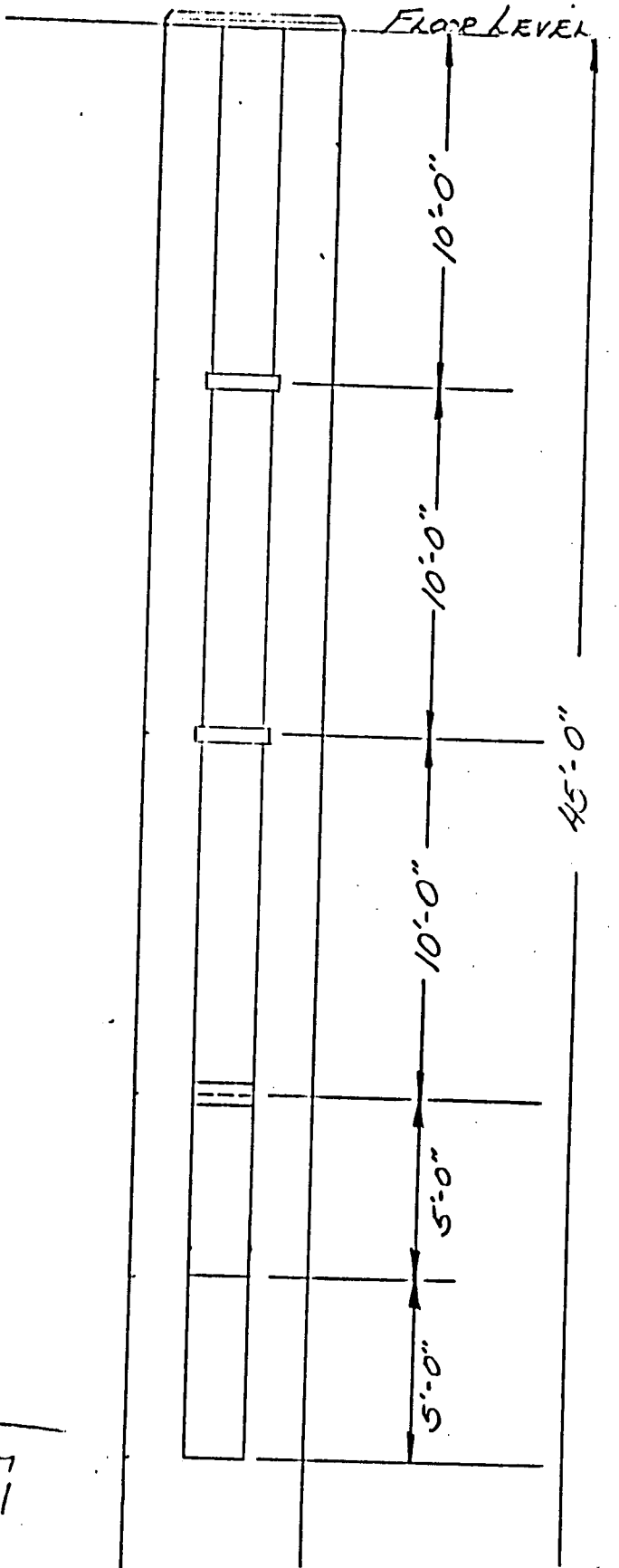
Sand and/or Salt Storage
Fuel Storage
Landfill or Dump
Industries Tower Press In 3/10 mile, T.I. Quinn MFG.Co. - 1/4 mi.

Results of inspections in accordance with 310 CMR 22.21(3) for this reporting period
No. of violations 0 No. of notices served 0 No. of violations obtained 0
What was the general condition of the area surrounding the well at the time of the last inspection? Good

ADDITIONAL COMMENTS: Well #1 is not in operation

*Please fill out one sheet for each groundwater source

Salisbury Water Co. North Pumping Sta. #1



Fine to coarse brown sand & gravel

Fine to coarse brown sand & gravel

Fine & coarse grey sand & gravel

Fine & coarse grey sand & sharp gravel

Scale: Horiz 1/2" = 1'

GROUNDWATER SURVEY
REPORT

Date filed: January 27, 1987
Reporting period: 1/1/87 to 12/31/87

Town Salisbury
PWS ID# 3259000

Completion and filing of this report meets the requirements of the Drinking Water regulations of Massachusetts 310 CMR 22.21(3)

Public Water Supply System Name Salisbury Water Supply Co.

Address Box 633 No. Hampton, N.H. 03862

Name and Title of Person
Completing report Laurel Flax Operation Superintendent
Tel. 617-462-6732

Name of Well* Well #5 - Lena Mae's Way
Location of Well Lena Mae's Way - Salisbury
Area around well owned by Water Utility 9.3 acres
Distance from well owned by Water Utility Minimum 300' Maximum 1400'

1. Please list distance from well to any of the following, if less than 400 feet:

Road	Homes
Stream	Business
Surface Drain	Office
Sanitary Sewer	Subsurface Sewage System
Farm	Garage
Miles of road within 400 feet	Parking Area (how many vehicles)
	Storage area
	Other Use

2. Please list distance from well to any of the following if less than 1/2 mile:

Sand and/or Salt Storage
Fuel Storage
Landfill or Dump
Industries

Results of inspections in accordance with 310 CMR 22.21(3) for this reporting period
No. of violations 0 No. of notices served 0 No. of violations obtained 0
What was the general condition of the area surrounding the well at the time of the last inspection? None

ADDITIONAL COMMENTS: Wells #5 and #6 are in the same area. Average is for both.

*Please fill out one sheet for each groundwater source

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF WATER SUPPLY

Registration No.: _____
Status: _____
Date Received: _____

FORM B

WATER MANAGEMENT ACT REGISTRATION FORM B FOR A GROUNDWATER WITHDRAWAL POINT

Please complete a Form B for each Groundwater Withdrawal Point.

GROUNDWATER INFORMATION: (Please provide as much information as possible)

1. Public water supply system ID#, if applicable: 3259000
   Source Code: 259-04 G
   Source Name: Well #5

2. Address of withdrawal point:
   Street: Lena Mae's Way

   City: Salisbury State: MA Zip code: 01952 -

   County: Essex

3. Has this well been closed due to contamination at any time since 1981?
   No: X Yes: ___ If so, when? _____ By whom? _____

4. Status of well: permanent: X emergency: _____ temporary: _____
   Year put in use: 1957

5. Land surface elevation at withdrawal point: ~56 (MSL)

6. Aquifer type: bedrock: _____ unconsolidated: X

7. Is the aquifer confined: _____ unconfined: X

8. Depth to bedrock: _____ (ft. below land surface) unknown

9. Bedrock type: unknown

10. USGS topographic quadrangle name: NW/4 Exeter 15' Quadrangle

11. What are the coordinates of the withdrawal point? Locate well on USGS map provided.
    See attached Map Latitude: _____ Longitude: _____

12. Sub-drainage basin name: Unknown

WELL SPECIFIC INFORMATION: (Please provide as much information as possible)

13. Driller's name: D.L. Maher Co.
    Address: Street: P.O. Box 127
    City: North Reading State: MA Zip code: 01864 -
    Phone: (617) 933-3210

14. Well type: Gravel pack: X Gravel developed: _____
    Tubular well field: _____ Dug well: _____
    Other: _____

FORM B (continued)

Year Installed: 1956 Well depth: 43'9" (ft.)

16. Casing diameter: 24 (in.) Top of casing: _____ (MSL) unknown
Length of casing: 33'9" (ft.) Gravel pack diameter: 3 (ft.)

17. Screen length: 10' (ft.) Slot size: _____ unknown - S.S. Screen
Screen diameter: 24 (in.) Depth to top of screen: 33'9" (ft.)

18. Static water level when installed: _____ (MSL) 9'8" from top of casing

PUMPING EQUIPMENT INFORMATION: (Please provide as much information as possible)

19. Was a pump test conducted on this well when installed? No: ___ Yes: X
If yes, please detail the date, duration of test, name and address of the Engineering firm or attach a copy of the report.
Report Attached

20. Maximum physical pumping capacity of well: 508 (GPM)
Year measured: 1972

21. If this is a public supply well, what is the maximum permissible yield as determined by DEQE? * (GPM). Date of determination: __/__/__

22. For other than public supplies, what is the estimated safe well yield: _____ (GPM). Describe safe well yield calculation:

23. What is the rated pump capacity? 400 (GPM)

24. Specific capacity of well when installed: 55 (Gal./min./ft.)
Present specific capacity of well: Unknown (Gal./min./ft.)

25. Power source:
Regular: Electric: X Diesel: ___ Gasoline: ___ Other: ___
Standby: N/A Electric: ___ Diesel: ___ Gasoline: ___ Other: ___

For non-electric power sources, where is fuel stored? N/A
On-site: ___ Off-site: ___ Above ground: ___ Below ground: ___

Distance of fuel storage area from the well: N/A (ft.)

Type of flow measurement device at pump station:
Weir: ___ Venturi: X Meter: ___ None: ___
Other (please explain): Oriface plate

Capacity of flow measurement device at pump station: 700 (GPM)

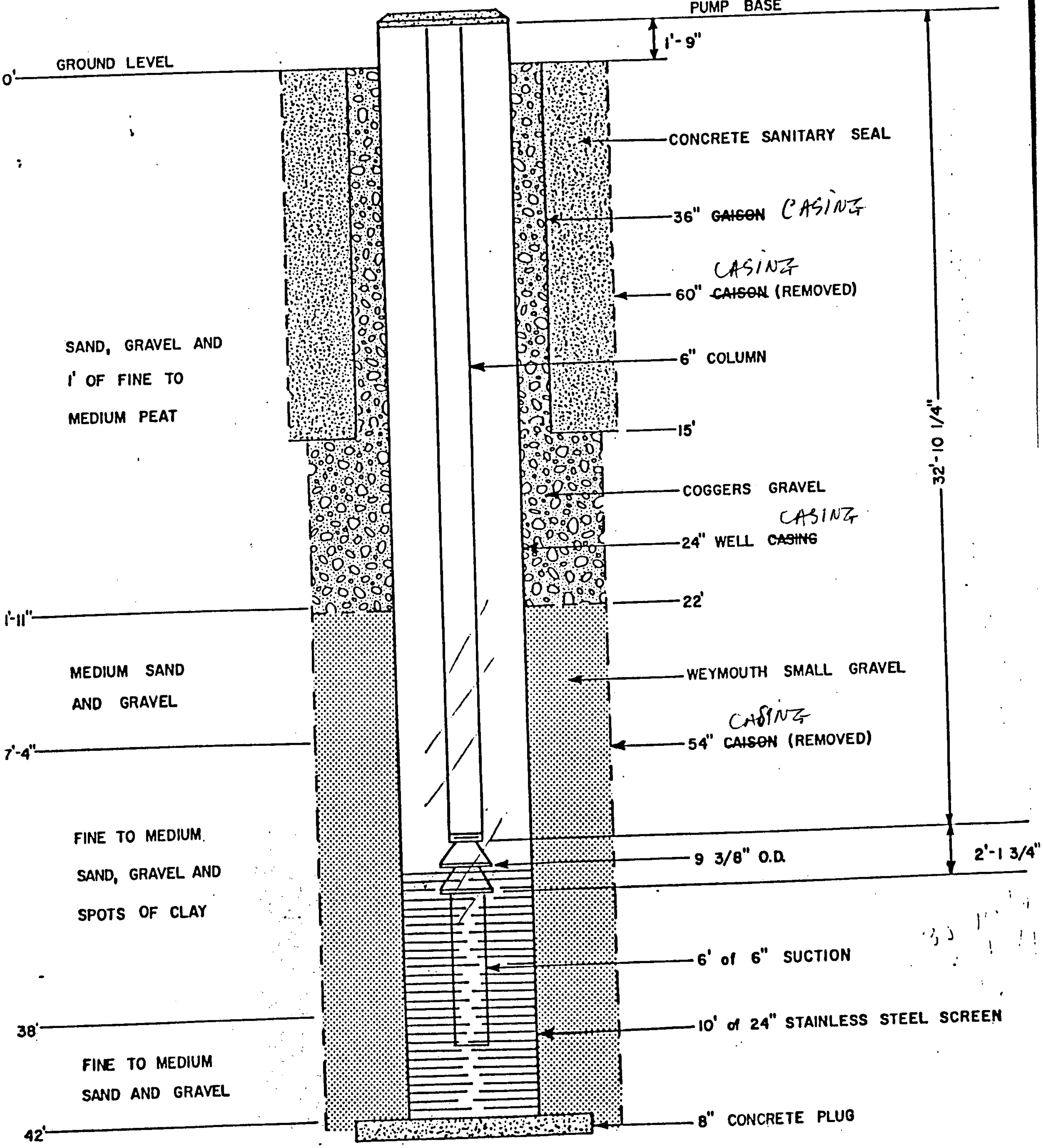
How are recordings made? continuous: X manual: ___
If manually, how often? _____

When was the flow measurement device last calibrated? Date 12 / 11 / 85

* MG - defined by A.W.W. Service Co. - unknown date

Installed 1956 W.O. A-81
In Service 1957

OFF MAIN ST. WELL NO. 5
SALISBURY WATER CO.



GROUNDWATER SURVEY REPORT

Date filed: January 27, 1987 Town Salisbury
Reporting period: 1/1/86 to 12/31/86 PWS ID# 3259000

Completion and filing of this report meets the requirements of the Drinking Water regulations of Massachusetts 310 CMR 22.21(3)

Public Water Supply System Name Salisbury Water Supply Co.

Address P.O. Box 633, No. Hampton, N.H. 03862

Name and Title of Person
Completing report Laurel Flax Operations Supertindent
Tel. 617 462-6732

Name of Well* Well #6 Lena Mae's Way
Location of Well Lena Mae's Way Salisbury
Area around well owned by Water Utility 9.3 Acres
Distance from well owned by Water Utility Minimum 350' Maximum 1500'

1. Please list distance from well to any of the following, if less than 400 feet:

Road _____
Stream _____
Surface Drain _____
Sanitary Sewer _____
Farm _____
Miles of road within 400 feet _____

Homes _____
Business _____
Office _____
Subsurface Sewage System _____
Garage _____
Parking Area (how many vehicles) _____
Storage area _____
Other Use _____

2. Please list distance from well to any of the following if less than 1/2 mile:

Sand and/or Salt Storage _____
Fuel Storage _____
Landfill or Dump _____
Industries _____

Results of inspections in accordance with 310 CMR 22.21(3) for this reporting period
No. of violations _____ No. of notices served ___ No. of violations obtained ___
What was the general condition of the area surrounding the well at the time of the last inspection? _____

ADDITIONAL COMMENTS: Wells #5 and #6 are in the same area. Acreage is for both.

*Please fill out one sheet for each groundwater source

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING
DIVISION OF WATER SUPPLY

Registration No.: _____
Status: _____
Date Received: _____

FORM B

WATER MANAGEMENT ACT REGISTRATION FORM B FOR A GROUNDWATER WITHDRAWAL POINT

Please complete a Form B for each Groundwater Withdrawal Point.

GROUNDWATER INFORMATION: (Please provide as much information as possible)

1. Public water supply system ID#, if applicable: 3259000
   Source Code: 259-05G
   Source Name: Well #6

2. Address of withdrawal point:
   Street: Lena Mae's Way

   City: Salisbury State: MA Zip code: 01952 -____

   County: Essex

3. Has this well been closed due to contamination at any time since 1981?
   No: X Yes: ___ If so, when? _____ By whom? _____

4. Status of well: permanent: X emergency: _____ temporary: _____
   Year put in use: 1961

5. Land surface elevation at withdrawal point: ~ 58 (MSL)

6. Aquifer type: bedrock: _____ unconsolidated: X

7. Is the aquifer confined: _____ unconfined: X

8. Depth to bedrock: _____ (ft. below land surface) unknown

9. Bedrock type: unknown

10. USGS topographic quadrangle name: NW/4 Exeter 15' quadrangle

11. What are the coordinates of the withdrawal point? Locate well on USGS map provided.
    Latitude: _____ Longitude: _____
    see attached map

12. Sub-drainage basin name: unknown

WELL SPECIFIC INFORMATION: (Please provide as much information as possible)

13. Driller's name: D.L. Maher Co.
    Address: Street: P.O. Box 127
    City: North Reading State: MA Zip code: 01860 -____
    Phone: (617) 933-3210

14. Well type: Gravel pack: X Gravel developed: _____
    Tubular well field: _____ Dug well: _____
    Other:

Year Installed: 1961 Well depth: 55'7" (ft.)

Casing diameter: 24" (in.) Top of casing: _____ (MSL) Unknown
Length of casing: 40'7" (ft.) Gravel pack diameter: 3' (ft.)

17. Screen length: 15' (ft.) Slot size: S.S. Louver Screen #304
Screen diameter: 24" (in.) Depth to top of screen: 40'7" (ft.)

18. Static water level when installed: _____ (MSL) 2'-3" from top of casing

PUMPING EQUIPMENT INFORMATION: (Please provide as much information as possible)

19. Was a pump test conducted on this well when installed? No: ___ Yes: X
If yes, please detail the date, duration of test, name and address of the Engineering firm or attach a copy of the report.
Report Attached

20. Maximum physical pumping capacity of well: 608 (GPM)
Year measured: 1961

21. If this is a public supply well, what is the maximum permissible yield as determined by DEQE? * (GPM). Date of determination: __/__/__

22. For other than public supplies, what is the estimated safe well yield: _____ (GPM). Describe safe well yield calculation:

23. What is the rated pump capacity? 450 (GPM)

24. Specific capacity of well when installed: 24.3 (Gal./min./ft.)
Present specific capacity of well: Unknown (Gal./min./ft.)

25. Power source:
Regular: Electric: X Diesel: ___ Gasoline: ___ Other: ___
Standby: N/A Electric: ___ Diesel: ___ Gasoline: ___ Other: ___

For non-electric power sources, where is fuel stored? N/A
On-site: ____ Off-site: ____ Above ground: ___ Below ground: ___

Distance of fuel storage area from the well: N/A (ft.)

Type of flow measurement device at pump station:
Weir: ____ Venturi: ____ Meter: X None: ____
Other (please explain): _____

Capacity of flow measurement device at pump station: 1250 (GPM)

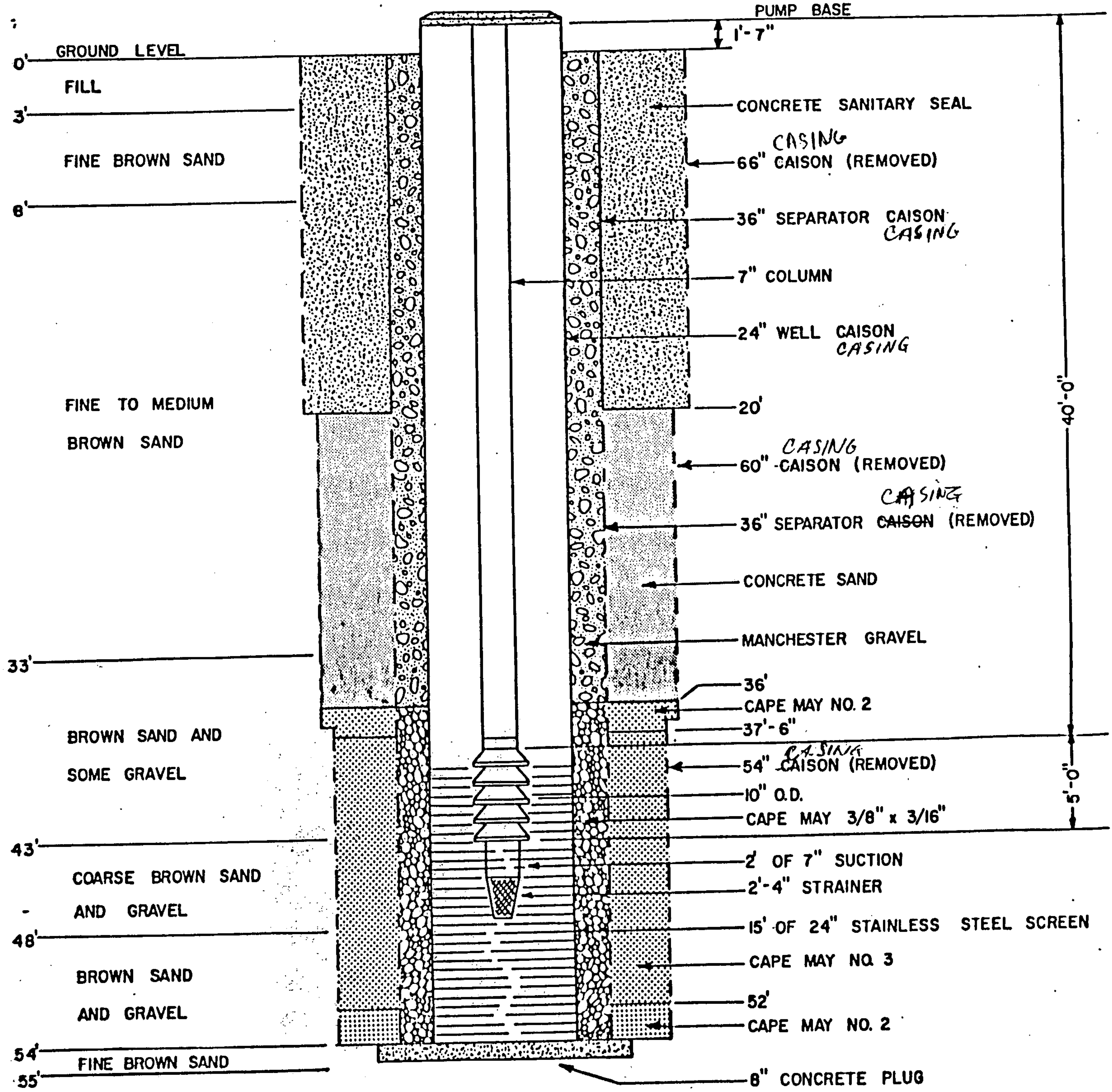
How are recordings made? continuous: _____ manual: X
If manually, how often? Daily

When was the flow measurement device last calibrated? Date 12 / 11 / 85

.34MGD - defined by A.W.W. Service Co. - unknown date

[illegible] -128

OFF MAIN ST. WELL NO. 6
SALISBURY WATER CO.



SCALE: HORIZONTAL 1/2"= 1'-0"

APPENDIX 2

The Commonwealth of Massachusetts

Department Of Environmental Quality Engineering

Lawrence Experiment Station

SEP 2 1983

GAS CHROMATOGRAPHY-MASS SPECTROMETRY ANALYSIS

OF PURGEABLE ORGANICS

SAMPLE NUMBER	010553	CITY/TOWN	Salisbury
COLLECTOR	K. R. Brown	COLLECTED	August 23, 1983
RECEIVED	August 23, 1983	ANALYZED	August 23, 1983
SOURCE	Well #1		

APPROVED BY JRP

☐ **No purgeable organic compounds detected.**

	ug/l		ug/l
Tetrahydrofuran	*		
1,1,1 trichloroethane	6.8		
Trichloroethylene	1.9		

The sample was analyzed according to the EPA procedure, "Method 624-Organics by Purge and Trap". Only those organic compounds which have a significant vapor pressure in aqueous solution at room temperature and thus are amenable to partition by purging are detected by this procedure.

L1 = less than 1.0 ug/l L5 = less than 5.0 ug/l L10 = less than 10 ug/l

*No standard available for quantitation. The mass spectrum obtained was compared to a mass spectral index and a mass spectral data base for identification.

REMARKS:

The Commonwealth of Massachusetts

Department Of Environmental Quality Engineering

Lawrence Experiment Station

SEP 2 1983

GAS CHROMATOGRAPHY-MASS SPECTROMETRY ANALYSIS

OF PURGEABLE ORGANICS

SAMPLE NUMBER	010550	CITY/TOWN	SALISBURY
COLLECTOR	K. R. Brown	COLLECTED	August 22, 1983
RECEIVED	August 22, 1983	ANALYZED	August 22, 1983
SOURCE	Well #5		

APPROVED BY JSP

☑ **No purgeable organic compounds detected.**

	ug/l		ug/l

The sample was analyzed according to the EPA procedure, "Method 624-Organics by Purge and Trap". Only those organic compounds which have a significant vapor pressure in aqueous solution at room temperature and thus are amenable to partition by purging are detected by this procedure.

L1 = less than 1.0 ug/l L5 = less than 5.0 ug/l L10 = less than 10 ug/l

*No standard available for quantitation. The mass spectrum obtained was compared to a mass spectral index and a mass spectral data base for identification.

REMARKS:

The Commonwealth of Massachusetts

Department Of Environmental Quality Engineering

Lawrence Experiment Station

SEP 2 1983

GAS CHROMATOGRAPHY-MASS SPECTROMETRY ANALYSIS OF PURGEABLE ORGANICS

SAMPLE NUMBER	010552	CITY/TOWN	SALISBURY
COLLECTOR	K. R. Brown	COLLECTED	August 22, 1983
RECEIVED	August 22, 1983	ANALYZED	August 22, 1983
SOURCE	Well #6		

APPROVED BY

☑ No purgeable organic compounds detected.

	ug/l		ug/l

The sample was analyzed according to the EPA procedure, "Method 624-Organics by Purge and Trap". Only those organic compounds which have a significant vapor pressure in aqueous solution at room temperature and thus are amenable to partition by purging are detected by this procedure.

L1 = less than 1.0 ug/l L5 = less than 5.0 ug/l L10 = less than 10 ug/l

*No standard available for quantitation. The mass spectrum obtained was compared to a mass spectral index and a mass spectral data base for identification.

REMARKS:

RAI

RECEIVED

OCT 14 1983

KLK

Resource Analysts, Incorporated
Box 4778 Hampton, NH 03842
(603) 926-7777

ROY F. WESTON, INC.
CONCORD OFFICE

VOLATILE PRIOTITY POLLUTANT DETERMINATION

Lab No. 2620 Analyst RDF Date Analyzed 8-30

EPA Method 624 [X] ASTM Method D 3781-79 [ ]

Parameter	Sample Designation			
	2620 PW-1			
Acrolein				
Acrylonitrile				
Benzene				
Bis(chloromethyl)ether				
Bromoform				
Carbon Tetrachloride				
Chlorobenzene				
Chlorodibromomethane				
Chloroethane				
2-Chlorovinylether				
Chloroform				
Dichlorobromomethane				
Dichlorodifluromethane				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethylene				
1,2-Dichloropropane				
1,3-Dichloropropylene				
Ethylbenzene				
Methyl bromide				
Methyl chloride				
Methylene chloride				
1,1,2,2-Tetrachloroethane				
Tetrachloroethylene				
Toluene				
1,2-trans-Dichloroethylene				
1,1,1-Trichloroethane	6			
1,1,2-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl chloride				
Method Detection Limit	5 ug/L			
Acetone	Tr			
THF	Tr			

Method Detection Limit; 50 ug/L

NOTES: No entry denotes "not detected".

CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198606
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1 87 996	RAW	WELL # 5	02-17-87		H.S.

RESULTS (mg/L)	MCL	1
METHYLENE CHLORIDE		<0.001
1,1-DICHLOROETHYLENE		<0.001
trans-1,2-DICHLOROETHYLENE		<0.001
cis-1,2-DICHLOROETHYLENE		<0.001
1,2-DICHLOROETHANE		<0.001
1,1,1-TRICHLOROETHANE		<0.001
CARBON TETRACHLORIDE		<0.001
TRICHLOROETHYLENE		<0.001
TETRACHLOROETHYLENE		<0.001
BENZENE		<0.001
CHLOROBENZENE		<0.001
1,1-DICHLOROETHANE		<0.001
* CHLOROFORM		<0.001
* BROMODICHLOROMETHANE		<0.001
* CHLORODIBROMOMETHANE		<0.001
* BROMOFORM		<0.001

DATE SAMPLE REC'D: 02-24-87 ANALYST: JMB DATE OF ANALYSIS: 02-26-87

DAVID W. COLLINS 3-16-87
DIRECTOR DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT

PRIORITY POLLUTANTS
BASE/NEUTRAL EXTRACTABLES
METHOD EPA 625

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198606
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
870992	RAW	WELL # 5	02-17-87	10:40AM	H.S.

COMPOUND	RESULT (mg/L)	COMPOUND	RESULT (mg/L)
1,3-DICHLOROBENZENE	< 0.010	N-NITROSODIPHENYLAMINE	< 0.010
1,4-DICHLOROBENZENE	< 0.010	HEXACHLORBENZENE	< 0.010
HEXACHLOROETHANE	< 0.010	4-BROMOPHENYL PHENYL ETHER	< 0.010
bis(2-CHLOROETHYL)ETHER	< 0.010	PHENANTHRENE	< 0.010
1,2-DICHLOROBENZENE	< 0.010	ANTHRACENE	< 0.010
bis(2-CHLOROISOPROPYL)ETHER	< 0.010	Di-n-BUTYL PHTHALATE	< 0.010
N-NITROSO-di-n-PROPYLAMINE	< 0.010	FLUORANTHENE	< 0.010
NITROBENZENE	< 0.010	PYRENE	< 0.010
HEXACHLOROBUTADIENE	< 0.010	BENZIDINE	< 0.010
1,2,4-TRICHLORBENZENE	< 0.010	BUTYLBENZYL PHTHALATE	< 0.010
ISOPHORONE	< 0.010	bis(2-ETHYHEXYL)PHTHALATE	< 0.010
NAPHTHALENE	< 0.010	CHRYSENE	< 0.010
bis(2-CHLOROETHOXY)METHANE	< 0.010	BENZO(a)ANTHRACENE	< 0.010
HEXACHLORCYCLOPENTADIENE	< 0.010	3,3'-DICHLOROBENZIDINE	< 0.010
2-CHLORONAPHTHALANE	< 0.010	Di-n-OCTYL PHTHALATE	< 0.010
ACENAPHTHYLENE	< 0.010	BENZO(b)FLUORANTHENE	< 0.010
ACENAPHTHENE	< 0.010	BENZO(k)FLUORANTHENE	< 0.010
DIMETHYLPHTHALATE	< 0.010	BENZO(a)PYRENE	< 0.010
2,6-DINITROTOLUENE	< 0.010	INDENOL(1,2,3-c,d)PYRENE	< 0.010
FLUORENE	< 0.010	DIBENZO(a,h)ANTHRACENE	< 0.010
4-CHLOROPHENYL PHENYL ETHER	< 0.010	BENZO(g,h,i)PERYLENE	< 0.010
2,4-DINITROTOLUENE	< 0.010	N-NITROSODIMETHYLAMINE	< 0.010
1,2-DIPHENYLHYDRAZINE	< 0.010	bis(CHLOROMETHYL)ETHER	< 0.010
DIETHYL PHTHALATE	< 0.010	DIOXIN	< 0.010

DATE SAMPLE REC'D: 02-24-87 ANALYST: JMB NK NK DATE OF ANALYSIS: 3-6-87

DAVID W. COLLINS
DIRECTOR

3-16-87
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET

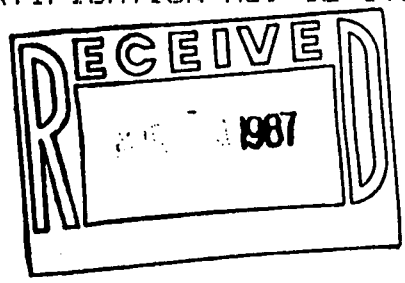
CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER



SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	871481	WELL	WELL #5	3/11/87	10:10AM	G. FAULKINGHA
2	871482	WELL	WELL #6	3/11/87	10:20AM	G. FAULKINGHA

RESULTS (mg/L)	MCL	1	2
METHYLENE CHLORIDE		<0.001	<0.001
1,1-DICHLOROETHYLENE		<0.001	<0.001
trans-1,2-DICHLOROETHYLENE		<0.001	<0.001
cis-1,2-DICHLOROETHYLENE		<0.001	<0.001
1,2-DICHLOROETHANE		<0.001	<0.001
1,1,1-TRICHLOROETHANE		<0.001	<0.001
CARBON TETRACHLORIDE		<0.001	<0.001
TRICHLOROETHYLENE		<0.001	<0.001
TETRACHLOROETHYLENE		<0.001	<0.001
BENZENE		<0.001	<0.001
CHLORDBENZENE		<0.001	<0.001
1,1-DICHLOROETHANE		<0.001	<0.001
* CHLOROFORM		<0.001	<0.001
* BROMODICHLOROMETHANE		<0.001	<0.001
* CHLORODIBROMOMETHANE		<0.001	<0.001
* BROMOFORM		<0.001	<0.001

DATE SAMPLE REC'D: 03-17-87 ANALYST: JMB DATE OF ANALYSIS: 03-21-87

DAVID W. COLLINS
DIRECTOR

3-31-87
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

RECEIVED
APR 23 1987

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	871974	RAW	WELL 5	04-07-87	10:10AM	G FAULKINGHAM
2	871975	RAW	WELL 6	04-07-87	10:20AM	G FAULKINGHAM
3	871976	RAW	WELL 12 - Hampton	04-07-87	11:10AM	H.S.

RESULTS (mg/L)	MCL	1	2	3
METHYLENE CHLORIDE		<0.001	<0.001	<0.001
1,1-DICHLOROETHYLENE		<0.001	<0.001	<0.001
trans-1,2-DICHLOROETHYLENE		<0.001	<0.001	<0.001
cis-1,2-DICHLOROETHYLENE		<0.001	<0.001	<0.001
1,2-DICHLOROETHANE		<0.001	<0.001	<0.001
1,1,1-TRICHLOROETHANE		<0.001	<0.001	0.001
CARBON TETRACHLORIDE		<0.001	<0.001	<0.001
TRICHLOROETHYLENE		<0.001	<0.001	<0.001
TETRACHLOROETHYLENE		<0.001	<0.001	<0.001
BENZENE		<0.001	<0.001	<0.001
CHLOROBENZENE		<0.001	<0.001	<0.001
1,1-DICHLOROETHANE		<0.001	<0.001	<0.001
*CHLOROFORM		<0.001	<0.001	<0.001
*BROMODICHLOROMETHANE		<0.001	<0.001	<0.001
*CHLORODIBROMOMETHANE		<0.001	<0.001	<0.001
*BROMOFORM		<0.001	<0.001	<0.001

DATE SAMPLE REC'D: 04-14-87 ANALYST: JMB DATE OF ANALYSIS: 04-16-87

David W. Collins 4-21-87

DAVID W. COLLINS
DIRECTOR

DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT

TRIHALOMETHANES
METHOD EPA 501.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	872498	RAW	WELL 6	05-05-87	11:10AM	H.S.
2	872499	RAW	WELL 7	05-05-87	11:30AM	H.S.
3	872500	RAW	TOWN HALL	05-05-87	10:50AM	H.S.

RESULTS (mg/L)	MCL	1	2	3
CHLOROFORM		<0.001	<0.001	<0.001
BROMODICHLOROMETHANE		<0.001	<0.001	<0.001
DIBROMOCHLOROMETHANE		<0.001	<0.001	<0.001
BROMOFORM		<0.001	<0.001	<0.001
TOTAL TRIHALOMETHANES	0.10	0.000	0.000	0.000

DATE SAMPLE REC'D: 05-12-87 ANALYST: JMB DATE OF ANALYSIS: 05-21-87

DAVID W. COLLINS 5-26-87
DIRECTOR DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	872496	RAW	WELL 5	05-05-87	11:05AM	H.S.
2	872497	RAW	WELL 6	05-05-87	11:10AM	H.S.

RESULTS (mg/L)	MCL	1	2
METHYLENE CHLORIDE		<0.001	<0.001
1,1-DICHLOROETHYLENE		<0.001	<0.001
trans-1,2-DICHLOROETHYLENE		<0.001	<0.001
cis-1,2-DICHLOROETHYLENE		<0.001	<0.001
1,2-DICHLOROETHANE		<0.001	<0.001
1,1,1-TRICHLOROETHANE		<0.001	<0.001
CARBON TETRACHLORIDE		<0.001	<0.001
TRICHLOROETHYLENE		<0.001	<0.001
TETRACHLOROETHYLENE		<0.001	<0.001
BENZENE		<0.001	<0.001
CHLOROBENZENE		<0.001	<0.001
1,1-DICHLOROETHANE		<0.001	<0.001
CHLOROFORM		<0.001	<0.001
BROMODICHLOROMETHANE		<0.001	<0.001
CHLORODIBROMOMETHANE		<0.001	<0.001
BROMOFORM		<0.001	<0.001

DATE SAMPLE REC'D: 05-12-87 ANALYST: JMB DATE OF ANALYSIS: 05-26-87

DAVID W. COLLINS
DIRECTOR

6-1-87
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT
PESTICIDES/MINERALS/METALS

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198606
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
873174	RAW	WELL 6	06-10-87	09:30AM	H.S.

PEST / HERB	MCL (mg/L)	RESULT (mg/L)	ANALYST	DATE
MINERALS				
ALKALINITY		40.0	DWC	06/29/87
CHLORIDE	250	68.4	DWC	07/01/87
FLUORIDE	1.4-2.	0.08	DWC	06/24/87
HARDNESS		76.4	DWC	06/23/87
MBAS	0.5	< 0.01	DWC	06/23/87
NO3-N	10	0.40	DWC	07/03/87
SULFATE	250	11.9	DWC	07/02/87
TDS	500	220	DWC	07/06/87

METALS	MCL (mg/L)	RESULT (mg/L)	ANALYST	DATE
ALUMINUM		< 0.001	RDB	06/23/87
ANTIMONY		< 1	RDB	06/23/87
ARSENIC	0.05	< 0.005	RDB	06/24/87
BARIUM	1.0	< 0.5	RDB	06/23/87
BERYLLIUM		< 0.1	RDB	06/23/87
BORON		< 0.1	RDB	06/23/87
CADMIUM	0.010	<0.0002	RDB	06/25/87
CALCIUM		20.4	RDB	06/23/87
CHROMIUM	0.05	< 0.001	RDB	06/24/87
COBALT		< 0.1	RDB	06/23/87
COPPER	1.0	< 0.02	RDB	06/23/87
IRON	0.3	< 0.05	RDB	06/23/87
LEAD	0.05	0.009	RDB	06/23/87
MAGNESIUM		6.13	RDB	06/23/87
MANGANESE	0.05	0.08	RDB	06/23/87
MERCURY	0.002	<0.0002	RDB	06/29/87
MOLYBDENUM		< 0.5	RDB	06/23/87
NICKEL		< 0.50	RDB	06/23/87
POTASSIUM		2.60	RDB	06/23/87
SELENIUM	0.01	< 0.003	RDB	06/25/87
SILVER	0.05	<0.0002	RDB	06/22/87
SODIUM		35.22	RDB	06/23/87
STRONTIUM		< 0.2	RDB	06/23/87
THALLIUM		< 0.5	RDB	06/23/87
VANADIUM		< 5	RDB	06/23/87
ZINC	5.0	< 0.05	RDB	06/23/87

DATE SAMPLE REC'D: 06-17-87 ANALYST: DWC RDB DATE OF ANALYSIS:

David Collins 7-7-87

DAVID W. COLLINS
DIRECTOR

DATE

BELLEVILLE LABORATORY

CHEMICAL ANALYSIS REPORT
PESTICIDES/MINERALS/METALS

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198606
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
873173	RAW	WELL 5	06-10-87	09:15AM	H.S.

PEST / HERB	MCL (mg/L)	RESULT (mg/L)	ANALYST	DATE
MINERALS				
ALKALINITY		34.0	DWC	06/29/87
CHLORIDE	250	31.3	DWC	07/01/87
FLUORIDE	1.4-2.	0.10	DWC	06/24/87
HARDNESS		77.1	DWC	06/23/87
MBAS	0.5	< 0.01	DWC	06/23/87
NO3-N	10	0.40	DWC	07/03/87
SULFATE	250	25.9	DWC	07/02/87
TDS	500	170	DWC	07/06/87

METALS	MCL (mg/L)	RESULT (mg/L)	ANALYST	DATE
ALUMINUM		< 0.001	RDB	06/23/87
ANTIMONY		< 1	RDB	06/23/87
* ARSENIC	0.05	< 0.005	RDB	06/24/87
* BARIUM	1.0	< 0.5	RDB	06/23/87
BERYLLIUM		< 0.1	RDB	06/23/87
BORON		< 0.1	RDB	06/23/87
* CADMIUM	0.010	<0.0002	RDB	06/25/87
* CALCIUM		20.0	RDB	06/23/87
* CHROMIUM	0.05	< 0.001	RDB	06/24/87
COBALT		< 0.1	RDB	06/23/87
* COPPER	1.0	< 0.02	RDB	06/23/87
* IRON	0.3	< 0.05	RDB	06/23/87
LEAD	0.05	< 0.005	RDB	06/23/87
MAGNESIUM		6.24	RDB	06/23/87
* MANGANESE	0.05	0.11	RDB	06/23/87
* MERCURY	0.002	<0.0002	RDB	06/29/87
MOLYBDENUM		< 0.5	RDB	06/23/87
NICKEL		< 0.50	RDB	06/23/87
POTASSIUM		2.51	RDB	06/23/87
* SELENIUM	0.01	< 0.003	RDB	06/25/87
* SILVER	0.05	<0.0002	RDB	06/22/87
* SODIUM		21.38	RDB	06/23/87
STRONTIUM		< 0.2	RDB	06/23/87
THALLIUM		< 0.5	RDB	06/23/87
VANADIUM		< 5	RDB	06/23/87
* ZINC	5.0	0.12	RDB	06/23/87

DATE SAMPLE REC'D: 06-17-87 ANALYST: DWC RDB DATE OF ANALYSIS:

DAVID W. COLLINS
DIRECTOR

7-7-87
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE CO., INC.

CHEMICAL ANALYSIS REPORT
VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	873176	RAW	WELL 5	06-10-87	09:15AM	H.S.
2	873177	RAW	WELL 7	06-10-87	10:00AM	H.S.

RESULTS (mg/L)	MCL	1	2
METHYLENE CHLORIDE		<0.001	<0.001
1,1-DICHLOROETHYLENE		<0.001	<0.001
trans-1,2-DICHLOROETHYLENE		<0.001	<0.001
cis-1,2-DICHLOROETHYLENE		<0.001	<0.001
1,2-DICHLOROETHANE		<0.001	<0.001
1,1,1-TRICHLOROETHANE		<0.001	<0.001
CARBON TETRACHLORIDE		<0.001	<0.001
TRICHLOROETHYLENE		<0.001	<0.001
TETRACHLOROETHYLENE		<0.001	<0.001
BENZENE		<0.001	<0.001
CHLOROBENZENE		<0.001	<0.001
1,1-DICHLOROETHANE		<0.001	<0.001
CHLOROFORM		<0.001	<0.001
BROMODICHLOROMETHANE		<0.001	<0.001
CHLORODIBROMOMETHANE		<0.001	<0.001
BROMOFORM		<0.001	<0.001

DATE SAMPLE REC'D: 06-17-87 ANALYST: JMB DATE OF ANALYSIS: 07-07-87

DAVID W. COLLINS 7-13-87
DIRECTOR DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220•(618)235-3600

CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

PANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT.

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

PLE INFORMATION

AMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
874025	RAW	WELL 5	07-14-87	09:20AM	H.S.
874026	RAW	WELL 5	07-14-87	09:30AM	H.S.

ULTS (mg/L)	MCL	1	2
HYLENE CHLORIDE		<0.001	<0.001
-DICHLOROETHYLENE		<0.001	<0.001
ns-1,2-DICHLOROETHYLENE		<0.001	<0.001
-1,2-DICHLOROETHYLENE		<0.001	<0.001
-DICHLOROETHANE		<0.001	<0.001
,1-TRICHLOROETHANE		<0.001	<0.001
BON TETRACHLORIDE		<0.001	<0.001
CHLOROETHYLENE		<0.001	<0.001
RACHLOROETHYLENE		<0.001	<0.001
ZENE		<0.001	<0.001
OROBENZENE		<0.001	<0.001
-DICHLOROETHANE		<0.001	<0.001
OROFORM		<0.001	<0.001
MODICHLOROMETHANE		<0.001	<0.001
ORODIBROMOMETHANE		<0.001	<0.001
MOFORM		<0.001	<0.001

SAMPLE REC'D: 07-21-87 ANALYST: JMB DATE OF ANALYSIS: 07-29-87

8-3-87

DAVID W. COLLINS
DIRECTOR

DATE

VILLE LABORATORY
CAN WATER WORKS SERVICE COMPANY, INC.
SOUTH ILLINOIS STREET
VILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT

TRIHALOMETHANES
METHOD EPA 501.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	874925	RAW	WELL #7	08/11/87	13:15PM	HS
2	874926	DIST	SHOP	08/11/87	14:10PM	HS
3	874927	DIST	TOWN OFFICE	08/11/87	14:00PM	HS
4	874928	RAW	WELL #5	08/11/87	13:35PM	HS

RESULTS (mg/L)	MCL	1	2	3	4
CHLOROFORM		<0.001	0.001	0.001	<0.001
BROMODICHLOROMETHANE		<0.001	<0.001	<0.001	<0.001
DIBROMOCHLOROMETHANE		<0.001	<0.001	<0.001	<0.001
BROMOFORM		<0.001	<0.001	<0.001	<0.001
TOTAL TRIHALOMETHANES	0.10	0.000	0.001	0.001	0.000

DATE SAMPLE REC'D: 08-16-87 ANALYST: JMB DATE OF ANALYSIS: 08-27-87

DAVID W. COLLINS
DIRECTOR

8-28-87
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220*(618)235-3600

CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	874929	RAW	WELL #5	08/11/87	13:35PM	HS
2	874930	RAW	WELL #7	08/11/87	13:15PM	HS

RESULTS (mg/L)	MCL	1	2
METHYLENE CHLORIDE		<0.001	<0.001
1,1-DICHLOROETHYLENE		<0.001	<0.001
trans-1,2-DICHLOROETHYLENE		<0.001	<0.001
cis-1,2-DICHLOROETHYLENE		<0.001	<0.001
1,2-DICHLOROETHANE		<0.001	<0.001
1,1,1-TRICHLOROETHANE		<0.001	<0.001
CARBON TETRACHLORIDE		<0.001	<0.001
TRICHLOROETHYLENE		<0.001	<0.001
TETRACHLOROETHYLENE		<0.001	<0.001
BENZENE		<0.001	<0.001
CHLOROBENZENE		<0.001	<0.001
1,1-DICHLOROETHANE		<0.001	<0.001
CHLOROFORM		<0.001	<0.001
BROMODICHLOROMETHANE		<0.001	<0.001
CHLORODIBROMOMETHANE		<0.001	<0.001
BROMOFORM		<0.001	<0.001

DATE SAMPLE REC'D: 08-18-87 ANALYST: JMB DATE OF ANALYSIS: 09-14-87

DAVID W. COLLINS
DIRECTOR

10-7-87
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220(618)235-3600

CHEMICAL ANALYSIS REPORT

VOLATILE ORGANICS
METHOD EPA 502.1,503.1

COMPANY: THE SALISBURY WATER SUPPLY CO. LAB CERTIFICATION NO. IL-198706
SALISBURY DISTRICT

NORTH HAMPTON , NH 03862

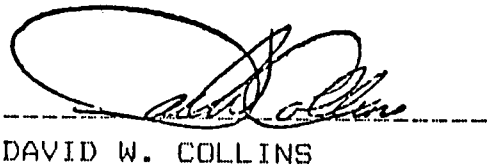
cc: E. COTE
cc: E. COMMANE
cc: R. MOSER

SAMPLE INFORMATION

	SAMPLE ID	TYPE	SAMPLE LOCATION	DATE	TIME	SAMPLER
1	876503		WELL #6	10/6/87	10:10	G. TAULBGHAM
2	876504		WELL #7	10/6/87	10:45	G. TAULBGHAM

RESULTS (mg/L)	MCL	1	2
METHYLENE CHLORIDE		<0.001	<0.001
1,1-DICHLOROETHYLENE		<0.001	<0.001
trans-1,2-DICHLOROETHYLENE		<0.001	<0.001
cis-1,2-DICHLOROETHYLENE		<0.001	<0.001
1,2-DICHLOROETHANE		<0.001	<0.001
1,1,1-TRICHLOROETHANE		<0.001	<0.001
CARBON TETRACHLORIDE		<0.001	<0.001
TRICHLOROETHYLENE		<0.001	<0.001
TETRACHLOROETHYLENE		<0.001	<0.001
BENZENE		<0.001	<0.001
CHLOROBENZENE		<0.001	<0.001
1,1-DICHLOROETHANE		<0.001	<0.001
*CHLOROFORM		<0.001	<0.001
*BROMODICHLOROMETHANE		<0.001	<0.001
*CHLORODIBROMOMETHANE		<0.001	<0.001
* BROMOFORM		<0.001	<0.001

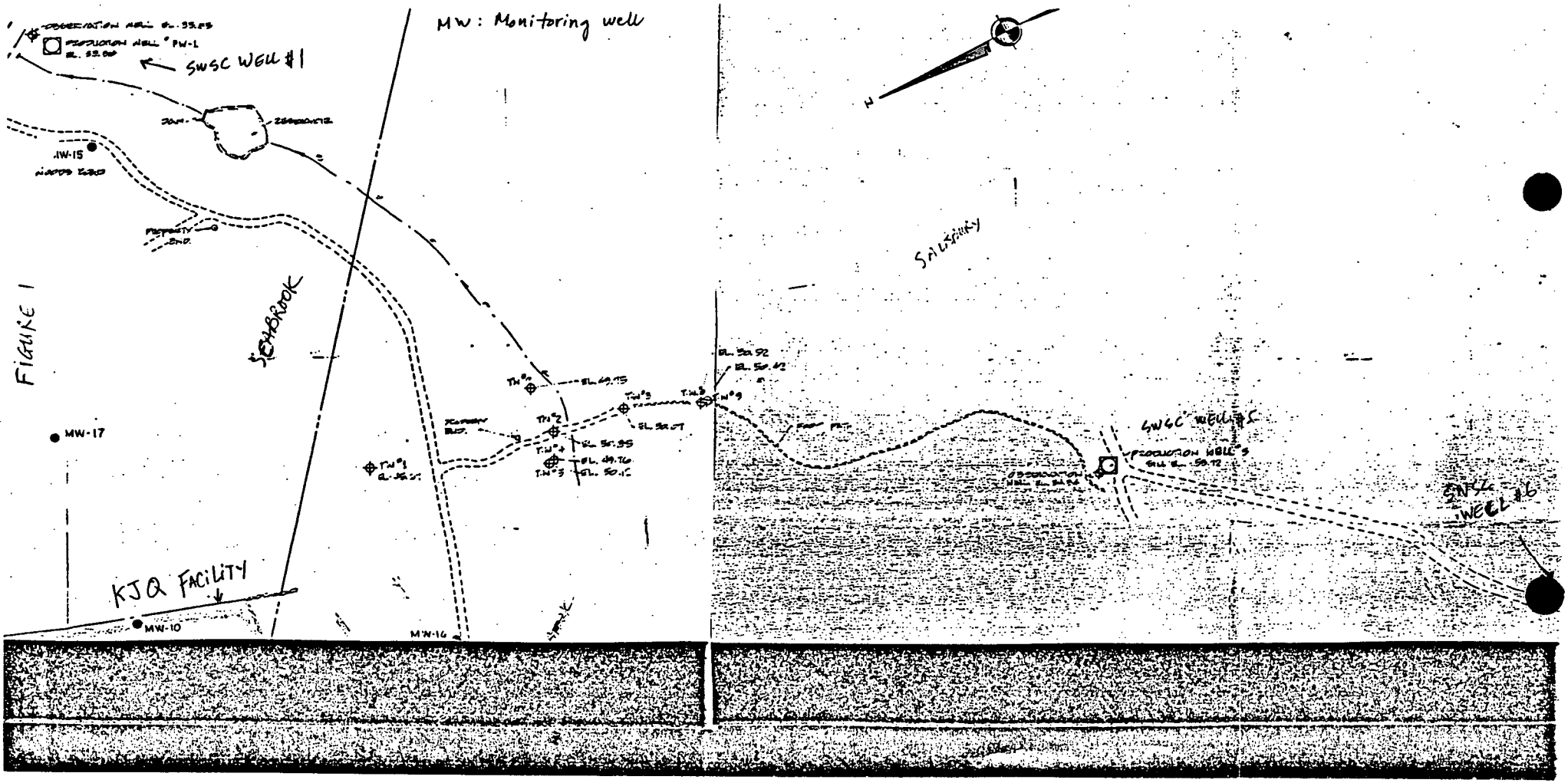
DATE SAMPLE REC'D: 10-14-87 ANALYST: JMB DATE OF ANALYSIS: 10-23-87



DAVID W. COLLINS
DIRECTOR

OCT 28 1987
DATE

BELLEVILLE LABORATORY
AMERICAN WATER WORKS SERVICE COMPANY, INC.
1115 SOUTH ILLINOIS STREET
BELLEVILLE, ILLINOIS 62220‡(618)235-3600


MW: Monitoring well
SWSC WELL #1
JW-15
MW-17
MW-10
MW-16
KJQ FACILITY
SEABROOK
SALISBURY
SWGC WELL #5
SWSC WELL #6
FIGURE 1

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
Division of Water Supply
One Winter Street, Boston, Mass. 02108

ANTHONY D. CORTESE Sc. D.
COMMISSIONER

copy Paul K WSM

MEMORANDUM

TO: Mr. Richard Chalpin

FROM: Mr. Gerry McCall, Deputy Director, D.W.S. GMc

DATE: March 12, 1984

SUBJECT: MIGRATION OF CONTAMINATION FROM THE K.J. QUINN CO. WELLS IN SEABROOK, N.H.

I feel that the comments of our geologist Mr. D'Amore are valid and should be incorporated into the response to the New Hampshire Water Supply and Pollution Control Commission. Well #11 shows high levels of contamination and until further analysis is done it is impossible and unwise to suggest that "there is no contamination migration from the Quinn property in direction of Salisbury Water Company production wells Nos. 5 and 6." Enclosed are Dennis D'Amore's comments. Please do not hesitate to contact me at 292-5767 with any further questions.

GM/YD/gg

Enclosures

cc: Dennis D'Amore

WESTON
2 CHENELL DRIVE
CONCORD, NEW HAMPSHIRE 03301
PHONE 603-228-1334

February 22, 1984

Mr. Michael P. Donahue, P.E.
Assistant Chief Engineer - Administrator
N.H. Water Supply & Pollution
Control Commission
P.O. Box 95, Hazen Drive
Concord, N. H. 03301

RE: K. J. Quinn, Seabrook
WO 2160-01-03

Dear Mr. Donahue:

During the month of December, 1983, three off-site monitoring wells were installed at K.J. Quinn Co. in Seabrook. The well locations are shown on the enclosed site plan. The wells were sampled in January 1984 and again in February 1984. The samples were analyzed for volatile organic compounds by GC-MS scan (EPA Method 624). The results of these analyses are summarized in the attached table.

The results obtained from MW-16 appear to indicate that there is no contaminant migration from the Quinn property in the direction of Salisbury Water Company production wells Nos. 5 and 6. An additional sample will, however, be collected from this well at the next monthly sampling of the on-site wells to confirm these results.

Please feel free to contact us if you have any questions regarding these results.

Sincerely,

ROY F. WESTON, INC.

John A. Gilbert

John A. Gilbert
Associate Project Engineer

JAG/nc

Enclosures

CC-John Minichiello
Richard Chalpin
Lynn Woodard
Samuel Gray
Gerald McCall

ANALYTICAL RESULTS SUMMARY
OFF-SITE WELLS
K. J. QUINN

NTAMINANT	MW-15		MW-16		MW-17	
	1/26/84	2/14/84	1/26/84	2/14/84	1/26/84	2/14/84
Acetone*				500		
Benzene				Trace	5	
Chloroethane					Trace	Trace
1,1-Dichloroethane					170	90
1,1-Dichloroethylene					15	15
Ethylbenzene						Trace
Methylene Chloride				Trace	Trace	Trace
Methyl Ethyl Ketone*			Trace			
Tetrahydrofuran*					16,000	16,000
Toluene		Trace		Trace		Trace
1,1,1-Trichloroethane	100	55			825	570

NOTE: All results in ug/l (ppb.) No entry denotes "Not Detected"

*Not a priority pollutant compound.

Gerry —

(1) What is the detection limit?

(2) Well #17 is pretty heavily contaminated. Have groundwater flow directions under non-pumping and pumping conditions been determined?

(3) I think (as you do) that it is too early to say that there is no contaminant migration moving towards wells 5 & 6. If anything, MW-16 is showing higher levels of contamination in February as compared to January's results.

Denis

APPENDIX 3

PUBLIC WATER SUPPLY SYSTEMS DATA - MVPC REGION

May 1987

1. City/Town: Salisbury Water Supply Co.

2. Water Supply Source(s):

	Source Name	Safe Yield (mgd)	% of Total
a.	Well #5	0.35	25%
b.	Well #6	0.35	25%
c.	Well #7	0.7	50%
d.	Amesbury Connection	1.15	Currently Emergency Source
e.			

3. Type of Treatment:

Narrative

Salisbury currently has no treatment, but within the next several months we will begin disinfection with Sodium Hypochlorite and Corrosian control with zinc polyphosphate

4. Quality of Supply(s):

Narrative

Generally the water is of good quality, some what high in iron and maganese and 20-40 mg/l sodium.

5. Average Day Demand (mgd):

1980	1981	1982	1983	1984	1985	1986
1.003	1.011	.988	1.108	1.116	1.152	1.185

6. Maximum Day Demand (mgd):

1980	1981	1982	1983	1984	1985	1986
2.15	1.847	2.214	2.209	2.110	2.235	2.077

7. Number of Customers by Sector:

	1980	1981	1982	1983	1984	1985	1986
Residential	Not Available		8252	8635	8830	9023	10173
Commercial			835	821	841	859	961
Industrial			36	36	36	36	36
Municipal/ Institutional	____	____	151	154	174	182	178
Total							
Percent							

8. Average Day Demand (mgd) by Sector:

	1980	1981	1982	1983	1984	1985	1986
Residential	Not Metered						
Commercial							
Industrial							
Municipal/ Institutional	____	____	____	____	____	____	____
Total							
Percent							

9. Water Supply Problems/Needs (Infrastructure, Capacity, Treatment, etc.)

Narrative

Salisbury is in need of a supplementary supply of water. The Company is currently looking to purchase water from Amesbury.

10. Local Contact Person:

Name Laurel Flax

Title/Department Operations Superintendent

Address PO Box 1149, 52 High St., Hampton, N.H.

Telephone No. 926-3319

DIVISION OF WATER SUPPLY

WATER SUPPLY STATISTICS

City/Town: Salisbury
Name of System Salisbury Water Supply Co.
P.W.S. I.D. Number 3259000
Population Supplied: 6544
Winter: 6544 Summer: 22,000

Please return this Completed Form To
Division of Water Supply
Dept. of Environmental Quality Eng.
1 Winter Street, 6th Floor
Boston, MA 02108

For the Year January 1, 19 To December 31, 19

Month	Water Pumped From Own Sources (1)	Water Purchased From Other Systems (2)	Water Sold to Other Systems (3)	Net Water Consumption (1) Plus (2) Minus (3)
January	33,637,000	0	1,662,000	31,975,000
February	29,954,000	0	0	29,954,000
March	34,408,000	0	0	34,408,000
April	33,821,000	0	0	33,821,000
May	40,032,000	0	0	40,032,000
June	41,869,000	0	0	41,869,000
July	49,545,000	255,000	0	49,800,000
August	46,783,000	0	0	46,783,000
September	36,587,000	0	0	36,587,000
October	29,040,000	142,000	0	29,182,000
November	30,339,000	0	0	30,339,000
December	26,803,000	13,000	0	26,816,000
TOTALS	432,818,000	410,000	1,662,000	431,566,000

(in Gallons)

Maximum Day Consumption

Date 7/25/86 Gallons 2,077,000

Maximum Weeks Consumption

From 7/20/86 THRU TO 7/26/86

Gallons 12,403,000

To the extent known to you, indicate the amount of water, in gallons, furnished to each class of user during the past year.

Residential 327279680
Agricultural 0
Commercial 25969080
Municipal 0
Industrial 4328180

Other Public Water Systems 1,662,000
Unaccounted for 73,579,000

Miles of mains (8") (and over) at end of year 29.73
No. of services in use at end of year 2435
No. of meters in use at end of year 35

Furnished by: Lawrence Flint

Title Operations Superintendent
Telephone # 617-462-6732
Date Filled Out 1/23/87

PLEASE TURN OVER

SECTION 2 INDIVIDUAL SOURCE STATISTICS

SOURCE NAME (Water Dept. Name)	01G WELL # 3	04G WELL #5	05G WELL #6	06G WELL #7	01D AMESBURY CONN.		
PUMPAGE DATA (GALLONS/ MONTH)							
January	0	12128000	14138000	7371000	0		
February	0	11869000	12822000	5263000	0		
March	0	13489000	16656000	4263000	0		
April	0	9762000	17673000	6386000	0		
May	0	13037000	18464000	8531000	0		
June	0	13558000	17751000	10560000	0		
July	0	14,214,	11,857,000	23,219,000	255,000		
August	0	15,380,000	11,858,000	19,545,000	0		
September	0	13,951,000	15,244,000	7,392,000	0		
October	0	11,627,000	6,326,000	11,145,000	0		
November	0	14,868,000	12,536,000	2,935,000	0		
December	0	7,329,000	5,139,000	14,322,000	13,000		
Totals	0	151,012,000	160,464,000	120,932,000	410,000		